

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. A multichip module for leads-on-chip mounting, comprising:

a lead-frame having a number of leads protruding laterally into said lead-frame and said leads having free ends;

a common, contiguous part of a wafer slice disposed in said lead-frame; ~~and~~

a number of semiconductor chips disposed next to one another in said lead-frame, ~~and~~ at least some of said semiconductor chips disposed in said lead-frame disposed on said common, contiguous part of said wafer slice, said semiconductor chips each having an upper side and bonding pads disposed on said upper side;

a fastening device for fastening said free ends of said leads protruding into said lead-frame, said fastening device

disposed on said upper side of individual ones of said
semiconductor chips; and

bonding connections electrically connecting said leads to
corresponding ones of said bonding pads;

said free ends of said leads having selected parts fastened
to said upper side of at least two of said semiconductor
chips and electrically connected to said bonding pads of said
at least two of said semiconductor chips.

2 (original). The multichip module according claim 1,
wherein said lead-frame has a lateral contour, and said
common, contiguous part of said wafer slice has a lateral
contour adapted to said lateral contour of said lead-frame.

3 (original). The multichip module according to claim 2,
wherein said lateral contour of said common, contiguous part
of said wafer slice with said semiconductor chips and said
lateral contour of said lead-frame are at a substantially
constant distance from one another all away around.

4 (original). The multichip module according to claim 2,
wherein said lateral contour of at least one of said lead-
frame and of said common, contiguous part of said wafer slice

has a shape selected from the group consisting of rectangular shapes and square shapes.

5 (original). The multichip module according to claim 1, wherein said number of said semiconductor chips disposed on said common, contiguous part of said wafer slice is $2n$, where n is equal to a natural number greater than or equal to 1.

6 (canceled).

7 (currently amended). The multichip module according to claim 1 6, wherein said fastening device is formed of carrier tapes disposed between said upper side of said semiconductor chips and an underside of said free ends of said leads.

8 (canceled).

9 (currently amended). The multichip module according to claim 1 8, wherein said selected parts of said free ends of said leads have branches selected from the group consisting of dovetail-shaped branches and T-shaped branches, and said branches are respectively fastened to said at least two of said semiconductor chips.

10 (original). The multichip module according to claim 1, wherein said free ends of said leads are one of mirror symmetric and rotational symmetric in their placement in said lead-frame.

11 (original). The multichip module according to claim 5, wherein said number n is equal to 1.

12 (original). The multichip module according to claim 5, wherein n is equal to 2.

13 (original). The multichip module according to claim 5, wherein n is equal to 3.

14 (original). The multichip module according to claim 5, wherein n is equal to 4.

15 (original). The multichip module according to claim 7, wherein said carrier tapes are formed from polyimide and are coated on both sides with a thermoplastic adhesive.

16 (withdrawn). A method for producing a multichip module for leads-on-chip mounting, which comprises the steps of:

mounting a number of semiconductor chips on a wafer slice
next to one another;

removing a part of the wafer slice having the semiconductor
chips from the wafer slice resulting in a common, contiguous
part; and

inserting the common, contiguous part in a lead-frame.